the fire for her during the first day or so, lest in her straining, Dian's womb "move to a new place," but Duan did it herself thereafter. The smoke was harder on others than for her for she was on the floor. She could leave the plank to bathe and to relieve herself through a crack in the floor. As soon as Chai got over being frightened of her turmeric-yellow stomach, he often came and lay beside her on the plank, though it was a squeeze! She took her medicine and often sipped hot water, feeling very modern with her brand-new thermos bottle. Constantly turning her back or front to the fire, she poked or dripped water on the flames to make coals. Once she tossed on a dry palm leaf, and as it flared up, put a cloth over her head to trap the smoke and heat. Though a rash developed on her body, she was complimented by Leh on the care she was taking of the heating and drying process. Unfortunately, a neighbor who wanted to help brought in some of the wood one day. Not remembering that to make noise with the wood caused diseased red eyes in the baby, she dropped the bundle with a crash! Alas, "aang" disease, of course, came at once. So the near-by [illegible] who always cared for them had to be called, but he used no medicine. "For eyes red from 'aang'," he said, "never use any eye-medicine as drops, or they will be permanently damaged or blind. Such eyes have not enough resistance to win over the strength of the medicine. A drop of mother's milk, any mother's, in the eyes is the cure."

Uterus pain was said to last one day for the first child, 2 days for the second, and so forth, increasingly. As Dian seemed to be in considerable pain, Leh resorted to an old cure: she secretly took the bamboo knife and the chisel from the baby's tray and put them under Duan's plank bed without telling her. Slowly the pain diminished.

If anyone spoke of uterus pain to her during the fire period, Duan would suffer still more. If a visitor spoke of the hotness of the fire, little boils would appear on her body. The fire, being thus made too hot, would have to be put out, and Duan "would be weak for a long time." This was because actions or even words occurring beside the baby fire set a new and permanent pattern. Neighbor's children were kept away lest they inadvertently exclaim about the heat.

A few relatives with gifts of banana, turmeric, and face powder dropped in, but visitors mostly stayed away. "It is an ugly sight," said Dian, "lying here with only a cloth over me, half naked and yellow, and I fear there might be an unpleasant smell."

The winnowing tray, with the baby on a pillow now covered with a plastic cloth, rested on a low table, the legs of which stood in bowls of water to keep away ants. At first an old dome-shaped fish trap had been set over it to prevent draft and

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854 mosquitos, but then Song bought in Minburi a bamboo frame with be-flowered netting. He also bought little mits to tie onto the baby's hands, so the fingers would not be sucked. Not every baby got these! Most of the time the baby lay naked, but was wrapped when nursed. One cool day they put over him a thick blanket. Lek, Duan, or Song bathed him in boiled water 3 times a day and always after his excretions, which were wiped off with cloths. Then fresh cloth was put under him. On the seventh day since he was thriving he was bathed in ordinary rain water. Every day Lek vigorously squeezed his fingers and legs "to make them straight," which made him yell each time. To speed the drying of the [854] cord, a charred leaf of betel pepper was applied for a [298] while to his navel on which Duan spit saliva several times a day.

853 Duan's milk supply was only fair. For milk stimulation they pressed her nipples and kept the fire hot. She was [262] also taking daily a special nursing curry of banana flower and vegetables (kaeng liang). One day she ate a cobra curry. A neighbor offered to help nurse the baby but Duan refused. "It is a pitiful sight to see one's child at [854] another's breast." Whenever the baby wailed he was given boiled water but was not necessarily at once picked up. If his crying continued, however, Duan washed her breasts with warm water, pressed out and threw away a little milk, moistened the baby's lips with water, then lifted him on the pillow to her plank. She laid him beside her and leaned over him to nurse, though occasionally took him in her arms. He was nursed about 10 times a day, and also received honey, boiled water, and a bit of banana, too. [278] One day the baby cried a lot, so they painted him with turmeric and gave him baked cobra tail in alcohol to warm him up.

846 As to her own diet, Duan followed the usual practice 262 of limiting herself rigidly to rice with salt, dried fish, and baked kluai namwa bananas. Egg was too cooling! "like glutinous rice, it brought pus to the unhealed cord and the vaginal wound." Duan also avoided "jam" bean which caused madness, fruit, and sweets. Whatever she ate affected her child by secreting into her milk. If she were sick, he would be so too. If he alone became ill, she must watch the foods both he and she ate. All these food instructions would stop only when nursing stopped a year or two later.

846 Duan decided to stay only 11 days by the fire, though Lek had told 15 and she would have liked to stay longer. However, she wanted to get back to work because the transplanting season was approaching. Besides, the

wood was getting low. Friday (*wan sùk*, day of happiness) was the best day of all to leave the fire, but for her, Friday happened to fall on the fourteenth day after delivery. It was better to come off on another day than to risk taking such an important step on an even-numbered day. Even numbers were always associated with the even corners of a coffin. 846 [801]

Usually the fire period went off safely, but not this time! One day, the heat "seemed to come up suddenly" and choke Dûan. She rose gasping and ran to the window for air. Horrified at the terrible danger of cool air, Lek hastened to get her back to the board. Then by accident Dûan dripped too much water on the fire and put it out! Later, Dûan was almost unconscious, felt unhappy (*sŭay*) and as if "the fire were burning inside her." Lek called both Sa-i and the *mô*. As the *mô* entered, Lek handed him the expected offering of incense, flowers, candle, and a baht and a half for his *khruu khâo*. He prayed to his teacher, then made holy water and a decoction both of which he gave Dûan to drink, saying, "The bad blood and the fish-water did not flow out well, a common trouble after childbirth. Since your body is not cold and the fire has not been out a half-day, you could start the fire up again. But as it is never good to put out the fire like this, I am taking you off it. Take a pot of salt, heat it well and wrap it in a cloth. Put that on your abdomen. Drink no cold water, or you will die." 846 755

Dûan was sad that she had to leave the fire early and on an even-numbered day, but one always wanted to obey a *mô*. All had gone so well when Chăi was born! That time she had taken the usual steps, choosing a Friday to come off the fire. Now she could not choose. Her formal leave of the fire was as before: The *mô* prepared earth holy water (*nammon thorranìkà*), some of which she drank, and some he sprinkled on the fire. She then knelt down facing the fire and touched her forehead to the floor 3 times, asking the Mother of the fire to bless her and her child, and to keep them well. She went outside to bathe, first with warm water to cleanse her body, then with holy water, and put on a clean shirt. Returning to the house she seated herself quietly, for she was not supposed to do anything for a time. Others in the family broke up the fireplace. The baby was taken off the winnowing tray. Warm water mixed with the holy water was dropped in his mouth. After being bathed in the holy water, he was laid in a little cradle made of a long cotton scarf, spread apart with sticks, and swung between 2 houseposts. 846 [854]

Now that the fire-period was over, they stopped all boiling of the water for the baby and Dûan. Rain water was substituted, but whenever the baby seemed sickly, boiled water was used. When their rain-water ran out, they got some at the temple. Both Dûan and the baby continued taking medicine for many weeks. [312] [758]

a new way was a woman bearing her first child because she was not yet ritually matured. This she wanted to be. Moreover, her self-interest led her to try to profit as much as possible from the experience of elders by first following the old way. By incorporating the experience of successful child-bearers into her own and the baby's life and by asking them to initiate actions auspiciously, she augmented by that much her own competence, and laid the groundwork for her future progress. Self-responsibility engendered respect for elders. Thus there was no split between old and young over innovations. Experience gave grounds both for conservatism and for changing, but at different age levels.

Secondly, changes were adopted by the rich who, spending their money rather conspicuously, sought to maintain and enhance their social position. Their wealth and position were in themselves unquestioned as signs of merit earned in another incarnation.

The changes being introduced to Bang Chan were of two kinds: first the prestigeful, and second, those giving no increment of esteem, i.e. idiosyncretic changes of taste or convenience; or those reflecting individual circumstances. The prestigeful innovations were oriented towards the use of market novelties, modern medical care, urban standards of cleanliness and beauty, and other ways termed "progressive" associated with the city of Bangkok, cynosure of the eyes of the rich. These values were leading certain families away from their original occupation of farming, into the fields of teaching, trading, carpentering, cottage-industry, etc. Since these new occupations brought in steady cash and large land holders, too, had a good income, an association was found of wealth, prestige, urban interests, and innovation. Comment on the hot ashes container (*fai chai*) indicated that it was a strong symbol of prestige and progress. To use it was "to get away from ignorance and the old way of doing things." It was "cleaner, not hot or ugly, and more convenient." One teacher took it up after reading an advertisement in the newspapers that described glowingly its more efficient healing effect. On the other hand, one woman abandoned the *fai chai* because "it was not hot enough to rid her of stiff muscles," so she went back to the use of the fire. "It is all right for rich Bangkok ladies who want to avoid a scar, but it does not give enough strength for a farmer." She had no urban pretensions. Also in this prestigeful aggregate, observed here and there, were the market novelties mentioned above: bed, mat, and mosquito net instead of the plank-bed; bits of medicine from the Chinese pharmacist instead of the old

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home brew; rub-on medicine (yā chup) instead of a fire or fire-container; canned cows' milk, and nursing bottles for the baby, and the bottles washed with salt; the transfer of a baby from the tray to the cloth cradle before the termination of the fire-rest because "he needed fresh air;" and the rejection of the turmeric rub against the wind element as "dirty and ugly."

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To use modern medical care was becoming prestigeful. Most spectacular here was a case of a prosperous and educated man who had had 9 children, then "feared he could not feed them all," so underwent voluntarily a vasectomy. Patronage of the second class doctors who used modern medications but explained them in traditional terms was frequent among the well-to-do. The Minburī Health Center, a resource in case of over-long and difficult labor, was beginning to be seen as a fashionable place to go for medical care and parturition. The case of the 2 teachers who laid plans ahead to go to the Center (but their quick labor precluded attempting to get there) showed that prestige had a stronger lure than convenience at times. It was much more convenient to bear a child at home, yet one of these teachers even talked about wanting to be delivered in Bangkok at the Woman's Hospital, an extreme of prestige and practical inaccessibility.

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The drive toward progressiveness led to conscious re-examining of those "old ways" that could be visually tested. One woman said, "There are fewer spirits (phī) nowadays." There was the mother who pondered the maxim about burning up all the wood collected by the husband to make a child finish tasks when he grew up. Finding it not true, she abandoned it at her next confinement. A man said that the old belief that papaya should not be planted near the house because "it dies easily and doesn't like water," and so would affect a child, was "unreasonable because the harm was not specific [e.g. a threat to skin or eyes]. If specific, I might believe it." An opening wedge of disbelief was noted where a woman gave no bit of rice to her baby to start a habit for later benefits because "she was told but didn't believe it," and another who said the "winnowing rite was not important."

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In addition to prestigeful changes were those due to individual circumstance, taste or preference, and convenience unaffected by social aspirations. One woman rejected going to the Minburī Center for delivery and took up the hot-ashes container instead of a fire because she could better direct her older children, and "it was less hard on them." A poor woman took no medicine during pregnancy because she had no money to buy it. A comment that of recent years medicines were purchased because "women are too lazy to make them up" as in the old days, sounded more personal than socially significant. A change induced by lack of money was that "hot spices

2%

262 expenditures by food groups is shown for the 11 families that
311 participated in the dietary study.

Consumption of canned foods was negligible. Some canned fish and fruits were on sale at stores in the village, in 1952-5%, but were seldom seen in homes.

262 Sweetened condensed milk, which was served in coffee
272 sold at the stores, was occasionally bought for the children.
350 On one occasion, a woman was seen buying milk diluted with
353 hot water as a beverage. Among 526 records of food eaten by school children during 24 hour periods, milk appeared twice only, once with coffee. Dried milk, for infant feeding, was used occasionally. During 1952-54, several instances were noted in which dried milk, mixed with water, was used to feed an infant while the mother was at work in the field or engaged in vending, but we encountered one case only of an infant who was not breast fed. This was an infant whose mother died when he was five days old, and who was reared by grandparents.

262 Relatively few items of food were available at the vil-
443 lage stores. In the inventory of the largest of the three
[27] stores in the village in 1948-49 (Sharp et al., 1953, pp. 211-212) the following items of food were listed: big dried chilies, shrimp paste, onion, garlic, fish sauce (fishsoy), salted fish, fresh chilies, limes, coconut, coconut oil[1], brown (palm)sugar, tea, coffee, condensed milk, orangeade and lemonade (carbonated), sweets, liquor, ingredients (including a lime paste) used together in betel chewing.[2]

New stock received in December by a local vendor who kept a few items for sale at her house included mature green beans, black beans, peanuts, sweet potatoes, salted turnip, pickled garlic and tomato sauce.

272 Larger stores served as informal men's clubs where tea,
443 coffee with condensed milk, and carbonated beverages were
515 sold primarily for consumption on the premises. The proprietor of a new store, built in December 1952, sold no liquor.

272 We have no estimate of the amount of liquor sold in Bang
443 Chan, although for those who drank it, its caloric value might
[27] be of significance.[3] About 9% of the householders interviewed

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[154] 1. Listed by Sharp et al. with non-food items, as much of it was burned in lamps.

2. Included here as food since some calcium may be obtained from this source.

3. One observer estimated the intake of certain village men who drank regularly as at least 2 oz. of rice liquor (28-35% alcohol) per day, representing about 100 calories. The estimated intake of women who drank regularly was about 1 oz. per day.

The observer often had
opportunity to make notes on foods eaten by various family members. Two examples of these are included in Appendix A, p. 97.

Snacks

We have noted that various family members ate the morning meal, in particular, at different times, and that children especially might eat leftover food between meals. Most Bang Chan school children[1] ate snacks, which were usually different from foods eaten at a regular meal. Doubtless most of them were purchased from one of the venders who were to be seen on the school grounds daily. Fruits and "desserts" were most commonly eaten, although a variety of other foods, not a part of the usual Thai meal, were also listed. Sweets were listed about 450 times on the 539 records obtained. Many of them had a base of rice, rice flour or glutinous rice with sugar, and included coconut, banana or other fruit. Some were made with legumes, and a few contained egg. Fried bananas, fried sweet potato slices, bananas or beans cooked in syrup, and bananas cooked in sweetened coconut milk were also listed. A few items such as ices, flavored syrup poured over shaved ice, and candies, had little nutrient value other than caloric content.

A glass of milk, and milk with coffee, were each listed once. These might have been obtained at the store adjoining the school grounds. These instances are worth noting primarily because, although dried and tinned milks were obtainable, milk was seldom given to village children after weaning.

Many children were given a bit of cash each day, and Janlekha (1955) commented that some children who did not have any might barter an egg for snacks. One could tell fairly well from the children's records what the venders offered for sale on a given day. Some influence of season was apparent; thus ices and syrup over shaved ice were eaten more often during the hot dry season, and cooked foods such as fried Chinese noodles appeared primarily in the cool season.

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1. With the cooperation of teachers of the third and fourth grades in the Bang Chan elementary school, records of food eaten during 24-hour periods were obtained from children in these grades at intervals of about one month during the school year. This was a regular activity in the health class. A total of 539 records (from 1 to 8 for each child) were obtained from 75 boys and 72 girls. To facilitate recording, each child was given a sheet of paper, with spaces for his name, the date, and kinds of food other than rice, eaten at the morning, noon and evening meals, and as snacks. These records were collected primarily for information on meal patterns of village families for comparison with the limited sample in the dietary survey, and on seasonal use of various foods.

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[17] takes it down the steps to the fish pond, where she swishes
[252] the basket around to wash the fish, and rinses her hands at the same time.

[253] There are some hazards to the food--chickens trying to get at the edible part of fish while the niece cleans it (she leaves the scales, etc. for them to eat); cat and kittens in the kitchen, having to be driven away from the grated coconut and coconut milk, and getting an occasional unweighed nip. Whether we start to weigh food for the evening meal or a.m. meal, some cooked foods are apt to be used, either left over [262] from a previous meal, or cooked in advance. This a.m., for [264] example, buffalo meat, already cooked (but not weighed before cooking) was used, and (3)khii-(2)leg leaves, which SS weighed last night. These latter were cooked last night, to reduce bitterness, then put into curry today.

Description of Food Preparation Area in a Relatively Poor Household

Wednesday, May 27, 1953

[17] Arrived about 5:45 a.m. While other food was being pre-
[260] pared, the 11-year old son came in with a package of salted white radish and a small milk tin with some coconut oil which had just been bought. This is the house which we found flooded when they sent for us to see the baby last fall. The roof seems to be well thatched. The floor is not wet after last [258] night's downpour. The bed platform, in one corner, is about [258] 8 x 10 feet. The baby's cradle hangs above it. In the oppo-[262] site corner is a shelf where utensils are kept. Some food, [258] in paper bags, is in a basket hung from the roof. Fresh fish [259] is kept in a jar of water until needed. The stove is on a small mound of earth, and further elevated on a small box (just big enough for the stove) filled with earth.

[258] We sit on a mat, spread on the mud floor, with the [255] scales, plastic bowls and waxed paper ready for weighing food. The children lie on a mat nearby. In the house is a fresh mound of earth, a small straw bin with rice, and various pieces of equipment.

One infant had congenital stridor when seen by the physician[1] at 3 months, but the difficulty in breathing had disappeared spontaneously before the baby was next visited at 3 1/2 months of age.

Illness in Early Infancy.

One infant that died on the fifth day was seen when one day old, at which time neither mother nor physician made any adverse comment on its condition. The mother, who was not living with her husband, returned to her work outside the village a week after delivery, and we were unable to talk with her again. So far as we could learn from neighbors, this infant had none of the symptoms concerning which we routinely inquired; namely, convulsions, vomiting, diarrhea, or fever.

A third infant in this series died when he was nearly 2 months old. At 13 days of age, when first seen, this infant had white patches on his tongue which were diagnosed as monilia-sis. When the physician saw the child again at 6 weeks of age he made no adverse comments on its condition. Emotional reaction to the infant's death was such that we were unable to get a clear description of events which led up to it from either parents or neighbors.[2]

Three infants had skin infections when seen within a few days after birth. The physician commented that skin was more susceptible to infection when moist than dry and that the babies had become very warm. The weather was hot, and babies were bundled up and/or were near the fire. He gave directions for keeping the skin clean and dusting with sulfa powder.

No deaths from tetanus occurred in this series, although infantile tetanus was prominent among causes of death of infants under one month old (Hauck, 1956).

Medicine Given to Babies During the First Few Days of Life.

On this point, information was obtained concerning 36 of 40 babies seen before they were 6 months old. Thirty of these were given medicine, sometimes more than one kind. Most of the

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1. A physician was present at all interviews with pregnant women and mothers with very young infants.

2. Although the mother had children by a previous marriage, this was the first child of this union, born after the parents had lived together for 9 years. The mother was 41 years old.

854 278 medications were taken internally, sometimes being painted on the tongue with a feather; but two preparations were applied over the abdomen. Some of the medications were described as "stomach medicine" or "to prevent flatulence." Five different kinds of proprietary medicine were given to 18 infants. In 13 instances, the medicine given was clearly homemade and included as major ingredients items such as flattery fruit, (3)lung (1)yauau; cobra oil; horseshoe crab; and buffalo skin. The nature of the medicine, whether homemade or proprietary, was not clear in 8 instances. Usually medicine for infants was mixed with honey, but in 2 cases, alcoholic liquor was used as it customarily was for the mother.

Six newborn infants in this series were given no medicine. One of these was born at the Health Center. One of the other 2 infants delivered at the Health Center was given homemade medicine later, and no information was obtained on the third. Eye prophylaxis[1] was probably routine at the Health Center, as, in 2 of the 3 cases delivered there, informants knew that drops had been put in the infant's eyes. Traditional midwives, however, did nothing of this sort.

Water for Drinking and Bathing.

853 312 For the newborn infant as well as for the mother, water for drinking and bathing was boiled and was usually used while hot, often being kept warm in a vacuum bottle. Either rain water or canal water might be used depending on what was available at a given season. The water was dribbled from an adult's fingers into the infant's mouth. When the mother was no longer lying by the fire, boiled water was not considered essential for the infant. Nevertheless, over half the infants seen from this time up to 3 months of age were being given boiled water to drink. After 6 months of age this was rare.

851 855 312 In one instance, during the time when a younger sibling received boiled canal water, a 21-month old child was given boiled water also. At the time of a later visit both of these children were drinking unboiled canal water. In another case an orphaned boy's formula was made up with boiled water, although

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[1] 1. Vaccination for smallpox was the only modern preventive treatment which we knew to be used in Bang Chan in the absence of an epidemic. Since a severe epidemic of smallpox with many deaths ten years previously, health officers came to the Bang Chan elementary school once a year to vaccinate children, and other residents of the community could be vaccinated at this time. Four of the young children whom we visited periodically were vaccinated, at 4 months, 8 months, 1 and 2 years of age, respectively.

Exposure of Infants to Sunlight.

• 354 Even during the rainy season sunshine was usually abundant in Bang Chan, but taking a baby out of doors at an early age was generally thought to involve some risk. Many houses had low or wide eaves, and an infant was usually kept in a cradle in the house where sunlight could not penetrate. When old enough to hold up its head while sitting astride an older person's hip, the infant might be carried about the compound by parents or older siblings. As the question was worded ("When did you take the baby outside the house?" or "At what age did you take the baby with you when you went out for pleasure?") the answer did not mean that the baby was taken out with any degree of regularity at the specified age. Most of the babies in this series had been taken outdoors by the time they were 3 months old, but 4 were a year or older when first exposed to sunshine. Nevertheless, the physician found no evidence of [164] rickets among the infants he examined.

One informant, a school teacher's wife, said she thought that taking the baby into the sunshine was not harmful; in fact she believed it made the baby stronger than usual. She thought, however, that too much exposure to sunshine might "bring cold into the baby" and she spoke of the beret as a protection against this.[1] In Bang Chan, an otherwise naked infant might wear a beret when being taken out of doors.

MATERNAL DIET

Diet During Pregnancy.

[94] [242] [125] Of 31 mothers who furnished some information on diet during pregnancy, 17 were pregnant when interviewed, and the remainder had young infants, in most cases under 3 months of age. Eighteen of the interviews were based on schedule 4 (Appendix p. 53) and provided fairly detailed information on the kinds of foods eaten. Other informants gave more general information, such as foods craved or disliked.

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[19] 1. Wellin (1956) mentioned the small woolen cap made or bought by mothers in the Valley of Ica, Peru, for the infant to wear. The cap was put on soon after birth and was worn, off and on, for many months. The function of the cap was to prevent the entrance of cold via the fontanel, which was defined as a particularly vulnerable point of entry. Wellin noted that all infants he saw in maternity wards in the Valley of Ica wore woolen caps.